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DETAILED DESCRIPTION [Detailed Description of the Invention]  
[0001]

[Industrial Application] This invention relates to the electronic mail system which offers various applications using the function of an electronic mail.

[0002]

[Description of the Prior Art] Various applications using an electronic mail have been developed as an electronic mail system spreads in recent years. Such applications perform processing required as application, and transmit this result to a user using an electronic mail. The application using the function of such an electronic mail is also called the electronic mail system.

[0003] The conventional electronic mail system is explained using drawing 9. The user directions section in which 101 receives the electronic mail transmitting section and 111 receives the directions from a user, The e-mail creation section in which 112 creates an electronic mail, the mail transfer section which transmits the electronic mail which 102 created, The e-mail receive section where 103 receives an electronic mail receive section and the electronic mail with which 131 is transmitted from the mail transfer section 102, The e-mail analysis section which analyzes the electronic mail which 132 received, and 133 create display information from an analysis result. The application process section in which the e-mail display to display and 104 perform the application section, and 141 processes application, and 142 are the e-mail creation sections which change the result of processing into the format of an electronic mail.

[0004] The outline of the usual electronic mail of operation is explained below. The usual electronic mail describes the contents of the electronic mail by the e-mail transmitting side, sets up the information on electronic mails, such as the destination and the addresser name of an electronic mail, and a subject, creates these

as an electronic mail and transmits it. In an e-mail receiving side, an electronic mail is received, the received electronic mail is analyzed, and the information on electronic mails, such as the destination of an electronic mail, and an addresser name, a subject, and the contents of the electronic mail are acquired. The result of these analyses is changed and displayed on a display format.

[0005] It explains using the conventional example which showed the above-mentioned outline of operation to drawing 9. The electronic mail transmitting section 101 is an e-mail transmitting side, and the user directions section 111 writes an electronic mail, sets up the destination of an electronic mail, or receives user actuation of transmitting an electronic mail. If a user directs transmission of e-mail in the user directions section 111, the user directions section 111 will pass the information on electronic mails, such as the contents of the electronic mail, and the destination of an electronic mail, to the e-mail creation section 112. The e-mail creation section 112 creates an electronic mail from the information on the contents or an electronic mail, and passes it to the mail transfer section 102.

[0006] The example of the format of the electronic mail passed to the mail transfer section 102 is shown in drawing 10 (a). An electronic mail consists of an e-mail information bureau 801 which describes the information on mail of a subject, the destination, an addresser, etc., and the e-mail text section 802 which describes the contents of e-mail. The e-mail information bureau 801 describes in the group of a keyword and its value. for example, -- "Subject: -- a patent -- " -- it is .

[0007] The mail transfer section 102 transmits an electronic mail to the electronic mail receive section 103. The e-mail receive section 131 receives an electronic mail, and hands the e-mail analysis section 132. In the e-mail analysis section 132, this is analyzed and an analysis result is passed to the e-mail display 133. The e-mail display 133 changes information required for a display into a display format, and outputs it to displays, such as a terminal and a printer.

[0008] Next, the outline of schedule pipe \*\* application of operation is explained below as an example of application. Schedule pipe \*\* application transmits the contents of reservation by E-mail to the person who was able to put in the schedule in order to tell that the schedule entered, if reservation of a schedule is put in to people. Schedule pipe \*\* application sets up the person who put the schedule into the addresser of an electronic mail so that it can

judge by the side from which who put in the schedule received the electronic mail.

[0009] The above-mentioned outline of operation is explained using drawing 9. The application section 104 is taken as schedule pipe \*\* application. The application process section 141 processes application proper, such as schedule registration, and passes the contents of reservation of a schedule, the destination of an electronic mail, etc. to the e-mail creation section 142. The e-mail creation section 142 creates an electronic mail from the received information, and passes it to the mail transfer section 102. The format of the electronic mail passed from schedule pipe \*\* application is the same as the format of the electronic mail passed from the usual electronic mail.

[0010] The example of the format of the electronic mail passed to drawing 10 (b) from schedule pipe \*\* application is shown. Subsequent processings are the same as the usual electronic mail. The example which displayed the list of the usual electronic mail and the electronic mails received from application is shown in drawing 11. The addresser name and subject of an electronic mail are displayed in the list of electronic mails.

[0011] Moreover, the conventional electronic mail system will usually perform that a user incorporates an electronic mail to his folder, if an electronic mail is received. An electronic mail is displayed by accessing this incorporated electronic mail. Moreover, as a function of the actuation to an electronic mail, there is a function "to classify an electronic mail to a folder." This function classifies the electronic mail which the user received to some folders for every contents, and is kept. Since an electronic mail is transmitted from various applications, a user classifies these electronic mails into the folder for every application, respectively. The electronic mail classified to the folder can be similarly displayed as the folder incorporated first, when it accesses to the folder.

[0012] Drawing 12 shows the configuration of the electronic mail receive section having such a function. The e-mail receive section where 105 receives an electronic mail receive section and 151 receives an electronic mail in drawing 12. The user directions section, as for 152, a user instructs actuation to be to a system, The folder Management Department which takes out an electronic mail from the folder which 153 moved the electronic mail between folders, or the user specified, The e-mail display, 901, 902 and 903, and -- which the e-mail analysis section in which 154

analyzes the contents of the electronic mail, and 155 create display information, and display an electronic mail are a folder which classifies an electronic mail. There is no limit in the number of folders to classify. In this example, the folder 901 is set up as a folder by which an electronic mail is incorporated first.

[0013] A user directs what "e-mail is incorporated for" to the user directions section 152, if it turns out that the electronic mail was received with the BIFUPU log ram etc. The user directions section 152 tells incorporation of an electronic mail to the e-mail receive section 151. The e-mail receive section 151 incorporates an electronic mail to a folder 901. Moreover, when displaying an electronic mail, a user directs which electronic mail of which folder is displayed to the user directions section 152. The user directions section 152 tells the folder Management Department 153 that. The folder Management Department 153 takes out the electronic mail specified from the specified folder, and hands the e-mail analysis section 154. The e-mail analysis section 154 analyzes the contents of the electronic mail, and passes an analysis result to the e-mail display 155. The e-mail display 155 changes information required for a display into a display format, and outputs it to displays, such as a terminal. Furthermore, when moving an electronic mail to another folder, a user directs which electronic mail is moved to which folder to the user directions section 152. The user directions section 152 tells the folder Management Department 153 that. The folder Management Department 153 moves an electronic mail to the specified folder.

[0014] Moreover, when the conventional electronic mail system displayed an electronic mail, also to the electronic mail in which folder, it is the same display format and showed the same item. The example which displayed the electronic mail on drawing 13 is shown. (a) of drawing 13 is an example which displayed the usual electronic mail, and (b) of drawing 13 is an example which displayed the electronic mail transmitted from schedule pipe \*\* application. Though the usual electronic mail was similar to the folder 901 by automatic and the electronic mail transmitted from schedule pipe \*\* application was similar to the folder 902 by automatic, even when which electronic mail is displayed, the contents of a subject, an addresser, and the electronic mail are completely displayed by the same display format.

[0015] Moreover, the approach of a broadcast message is used besides the electronic mail system as a means of communication using a computer in recent years. The approach of a broadcast

message describes the contents which an addresser wants to tell, and if the machine name which an addressee uses is specified, the contents will be displayed on the screen of the machine.

[0016] Drawing 14 shows the configuration of the conventional broadcasting message system. In drawing 14, 106 is a broadcast message sending set and 107 is a broadcast message receiving set. The broadcast message creation section in which 161 creates a broadcast message, The broadcast message transmitting section to which 162 transmits a broadcast message, The broadcast message receive section where 171 receives a broadcast message, The control section by which 172 controls a display and display termination of a broadcast message, The broadcast message display to which 173 performs a display and display termination of a broadcast message, and 174 are the broadcast message user directions sections a user instructs the checks which read the display of a broadcast message to be.

[0017] In the broadcast message sending set 106, if a user creates a message in the broadcast message creation section 161 and specifies a phase hand's machine name, the broadcast message creation section 161 will pass the machine name of the created message and a phase hand to the broadcast message transmitting section 162. The broadcast message transmitting section 162 transmits a message to the specified machine. In the broadcast message receiving set 107, if a broadcast message is received in the broadcast message receive section 171, the received addresser name of a message and a message will be passed to the control section 172. The control section 172 directs the display of delivery and a message for the addresser name of a message and a message to the broadcast message display 173. The broadcast message display 173 displays the received addresser name of a message and a message. The example which displayed the message is shown in drawing 15 . A user will push a confirmation button, if a message is checked. If a confirmation button is pushed, the user directions section 174 will tell having pushed the carbon button to the control section 172. The control section 172 directs termination of a display to the broadcast message display 173. The broadcast message display 173 ends a message indicator.

[0018]

[Problem(s) to be Solved by the Invention] However, in the above-mentioned conventional electronic mail system, since an electronic mail receive section does not have a means to distinguish whether it is the electronic mail transmitted from which application in the

first place, it is difficult to operate it for every application, and a user has to judge from the displayed contents. For example, when carrying out actuation of "deleting only the result of schedule pipe \*\* application", a user has to check and delete every one contents of e-mail. It is possible to attach an application name to a subject as an approach of distinguishing application, or to distinguish the addresser name of e-mail by making it the user of an application proper. However, in the case of a subject, it is also considered the electronic mail transmitted from the usual electronic mail and that the same subject as an application name is attached, and a user may change a subject in an electronic mail receive section. Therefore, application cannot be specified in a subject. Moreover, in the case of an addresser name, the application which does not make an application name an addresser name but makes a use user an addresser name is also considered. For example, in the schedule pipe \*\* application of the conventional example, an addresser name is the person who put in the schedule. Therefore, application cannot be specified by the addresser name.

[0019] In order for directions of a user to perform [ second ] incorporation of an electronic mail and migration to a folder, it thinks, also when there are many electronic mails transmitted at once depending on application, and the time amount which incorporation and migration of an electronic mail take becomes very long. Moreover, when classifying an electronic mail to a folder for every application, if there are many applications, the count of actuation for a classification increases and the user is serious.

[0020] If the information which should be shown to a user for every application differs and the same contents are displayed [ third ] with all applications, information does not get across to a user correctly -- information required for the application is missing. Moreover, if all the information included in an electronic mail is displayed, the field which can display a required item will become small by the item which does not have the need for a certain application is not only displaying, but displaying many unnecessary items. Furthermore, in order to display all the information included in an electronic mail, all the information on an electronic mail will have to be analyzed and analysis time amount will become long.

[0021] On the other hand, an electronic mail system with the display format according to each application or a display item is prepared for every application, and there is the approach of accessing only the folder holding the electronic mail sent from the application. However, a display format only differs from a display

item, and this approach serves as a system of the same configuration except e-mail displays, such as the folder Management Department and the e-mail analysis section. When two or more these systems operate, many memory resources of a computer are used, and also when there are many applications and it stops operating, it thinks.

[0022] With a broadcasting message system, if separated from the seat of the addressee, since a confirmation button cannot be pushed, a message is set [ being displayed as as, and ] to the fourth. Therefore, it thinks, also when a message is read by others, and the problem of security occurs. When others push a confirmation button and eliminate a message, it becomes impossible moreover, for an original addressee to read a message.

[0023] By the ability this invention's solving the above-mentioned conventional trouble, and judging in what was transmitted in the first place from which application in the electronic mail receive section Can operate it now for every application and an electronic mail system automatically the electronic mail for every application by classifying to the folder for every application [ second ] By third being able to mitigate the latency time of the user at the time of actuation of incorporation etc., and having correspondence of a folder, a display format, and a display item with an electronic mail system The display item suitable for the application which shortened the analysis time amount of e-mail and transmitted the electronic mail, Without displaying by the display format, and showing a user information exactly, and carrying out two or more actuation of the system When the memory resource of a computer can be utilized effectively and there is no check of a fixed time amount addressee in the fourth to the received broadcast message By changing a broadcast message into an electronic mail and ending the display of a message, a message is read by others or it aims at offering the electronic mail system which can prevent that it becomes impossible for an original addressee to read a message.

[0024]

[Means for Solving the Problem] In order to attain the above-mentioned purpose, in the first place, in addition to the conventional configuration, it has an application name adjunct in the application section, and, as for the electronic mail system of this invention, it has the application name analysis section in the electronic mail receive section.

[0025] It has the file corresponding to the application name / folder name the automatic-classification section which classifies the

electronic mail for every application into the second in an electronic mail receive section at a folder in addition to the above-mentioned configuration, and that correspondence which should just classify the electronic mail of which application into which folder are described to be.

[0026] It has the file corresponding to the folder name / display format correspondence of whether the electronic mail of which folder makes an electronic mail receive section display which display format and a display item on the third in addition to the above-mentioned configuration is described to be.

[0027] It has the timer control section which gives an electronic mail receive section timer control the fourth in addition to the configuration of the conventional broadcast message receiving set, and the e-mail transducer which changes a broadcast message into an electronic mail.

[0028]

[Function] This invention by judging from which application an electronic mail is transmitted for an electronic mail receive section in the first place by the above-mentioned configuration Come to be able to perform actuation for every application, and to the second, when an electronic mail receive section is similar by automatic for every application in an electronic mail at a folder When the latency time of the user at the time of actuation of incorporation etc. can be mitigated and an electronic mail receive section has correspondence of a folder, a display format, and a display item in the third The display item suitable for the application which shortened the analysis time amount of e-mail and transmitted the electronic mail, Without displaying by the display format, and showing a user information exactly, and carrying out two or more actuation of the system The memory resource of a computer is effectively utilizable. To the fourth an electronic mail receive section By changing a broadcast message into an electronic mail and ending the display of a message, when there is no check of a fixed time amount addressee to the received broadcast message A message can be read by others or it can prevent that it becomes impossible for an original addressee to read a message.

[0029]

[Example]

(Example 1) The 1st example of this invention is explained hereafter, referring to drawing 1 . In drawing 1, as for the user directions section and 12, the e-mail creation section and 2 are the mail transfer section, for the e-mail analysis section and 33, as for



the application section and 41, an e-mail display and 4 are [ an electronic mail receive section and 31 / an e-mail receive section and 32 / the application process section and 42 ] the e-mail creation sections, and the electronic mail transmitting section and 11 of 3 are [ 1 ] the same as that of the conventional example which these showed to drawing 9 . The application name adjunct which adds an application name to the mail which 43 creates, and 34 are the application name analysis sections which analyze from which application the received mail is transmitted.

[0030] Next, actuation of the 1st example of the above is explained. Actuation of the electronic mail transmitting section 1 is the same as the conventional example. In the application section 4, the application process section 41 will pass the application name else [ , such as the result, destination of e-mail, etc., ] to the e-mail creation section 42, if processing required for application is performed. The e-mail creation section 42 creates e-mail from the destination, a result, etc. Under the present circumstances, the application name passed from the application name adjunct 43 is added.

[0031] The example of addition of an application name is shown in drawing 2. The application name adjunct 43 adds the application name which are a keyword "Application:" and its value to an e-mail information bureau. Then, the e-mail creation section 42 passes the created mail to the mail transfer section 2. The mail transfer section 2 transmits e-mail to the destination of relevance. The e-mail receive section 31 will hand the e-mail analysis section 32, if e-mail is received. The e-mail analysis section 32 analyzes this mail. The group of a keyword "Application:" and its value is passed to the application name analysis section 34 in that case. The application name analysis section 34 analyzes an application name from the passed information, and returns it to the e-mail analysis section 32. Thereby, it can judge whether it is the mail transmitted from which application. The e-mail analysis section 32 passes information and an application name required for a display to the e-mail display 33. The e-mail display 33 changes information and an application name required for a display into a display format, and outputs them to a display.

[0032] The example which displayed the list of e-mail on drawing 3 is shown. In the list of e-mail, the addresser name and the application name other than a subject are displayed. For this reason, even if a user does not check the contents, he can judge whether it is the mail transmitted from which application. Moreover,

by searching using this item, only mail of a certain application can be deleted or a list can be displayed now.

[0033] As mentioned above, the electronic mail receive section 3 can judge whether it is the mail transmitted from which application, and actuation becomes possible according to this example for every application.

[0034] In addition, in this example, although the example of a display of a list of e-mail was given, neither a display format nor the contents of a display is limited. Moreover, it does not limit only to a list of e-mail, either.

[0035] (Example 2) Next, the 2nd example of this invention is explained, referring to drawing 4. The e-mail receive section where 5 receives an electronic mail receive section and 51 receives an electronic mail in drawing 4, The automatic-classification section which classifies into a folder automatically the electronic mail which 52 received, The user directions section, as for 53, a user instructs actuation to be to a system, The folder Management Department where 54 takes out an electronic mail from the folder of relevance, the e-mail analysis section in which 55 analyzes the contents of the electronic mail, The application name analysis section in which the electronic mail which 56 received analyzes from which application it is transmitted, The e-mail display which 57 creates display information and displays an electronic mail, the file corresponding to an application name / folder name 58 describes the classification place folder name of the electronic mail for every application to be, 59 is a file corresponding to the display format of the electronic mail held for every folder at the folder, and the folder name / display format which sets up a display item. 91, 92, 93, and -- are folders which classify an electronic mail.

[0036] Next, actuation of the 2nd example of the above is explained. The automatic-classification section 52 will pass the electronic mail received in the e-mail analysis section 55, if the e-mail receive section 51 is supervised periodically and the e-mail receive section 51 receives an electronic mail from the mail transfer section 2 of an example 1. The e-mail analysis section 55 analyzes this electronic mail, analyzes whether it is the electronic mail transmitted from which application in the application analysis section 56 like an example 1, and returns an application name to the automatic-classification section 52. The automatic-classification section 52 analyzes the file 58 corresponding to an application name / folder name, and acquires the folder name

corresponding to the application name acquired from the e-mail analysis section 55.

[0037] The example of the file 58 corresponding to an application name / folder name is shown in drawing 5. The group of an application name and a folder name describes the file 58 corresponding to an application name / folder name. Then, the automatic-classification section 52 moves an electronic mail to the folder of relevance, and ends automatic classification. For example, when the file 58 corresponding to the application name / folder name shown in drawing 5 was used and the application which the received electronic mail transmitted is an electronic mail, it is similar to an electronic mail folder by automatic, when it is schedule pipe \*\* application, it is similar to a schedule pipe \*\* folder by automatic, and when it is Application C, it is similar to Folder C by automatic.

[0038] When displaying an electronic mail, a user specifies a folder and an electronic mail to the user directions section 53, and directs a display. The user directions section 53 tells the folder Management Department 54 that. The folder Management Department 54 takes out the electronic mail specified from the specified folder, and hands the e-mail analysis section 55 with a folder name. In the e-mail analysis section 55, the information on the electronic mail which should be analyzed is acquired with reference to the file 59 corresponding to a folder name / display format, only the information is analyzed, and an analysis result is passed to the e-mail display 57 with a folder name. The e-mail display 57 acquires the display format corresponding to a folder name, and a display item with reference to the file 59 corresponding to a folder name / display format.

[0039] The example of the file 59 corresponding to a folder name / display format is shown in drawing 6. The group of a folder name and the information on the electronic mail corresponding to a corresponding display format, a display item, and each display item describes the file 59 corresponding to a folder name / display format. If the display format corresponding to the specified folder and a display item are acquired, the e-mail display 57 will change information required for a display into a display format, and will output it to e-mail displays, such as a terminal. For example, when the usual electronic mail and the electronic mail transmitted to the folder 92 from schedule pipe \*\* application are classified at the folder 91, the example the case where the usual electronic mail in a folder 91 is displayed, and at the time of displaying the electronic

mail transmitted from the schedule pipe \*\* application in a folder 92 is shown in drawing 7 .

[0040] The usual electronic mail displays the contents of a subject, an addresser, and the electronic mail like drawing 7 (a). The electronic mail transmitted from schedule pipe \*\* application makes an addresser a schedule input person, by making the destination of an electronic mail into a meeting participant, makes the contents of the electronic mail the contents of a meeting, and displays them like drawing 7 (b). Thus, while a user can understand easily, the meeting participant who is important information can be intelligibly displayed by making into schedule pipe \*\* to transmit the electronic mail displayed by displaying from schedule pipe \*\* application.

[0041] As mentioned above, according to this example, a user's latency time and number of actuation at the time of actuation of incorporation of an electronic mail etc. can be reduced by [ it had the file 58 corresponding to the application name / folder name which describes the classification place folder name of the electronic mail for every application in the electronic mail receive section, and the electronic mail system transmitted the received electronic mail to it ] being similar by automatic for every application.

[0042] Moreover, the memory resource of a computer can be utilized effectively, without shortening the analysis time amount of e-mail, displaying by the display item and display format suitable for the application which transmitted the electronic mail, and showing a user information exactly, and carrying out two or more actuation of the system, when an electronic mail system has the correspondence file 59 of a folder, a display format, and a display item. In addition, the example of a display given by this example limits neither a display format nor a display item.

[0043] (Example 3) Next, it explains, referring to drawing 8 about the 3rd example of this invention. The broadcast message receive section where 6 receives an electronic mail receive section and 61 receives a broadcast message in drawing 8 , 62 The display of a broadcast message, control of display termination, a setup and discharge of a timer, The control section which performs the directions which change a broadcast message into an electronic mail, The timer control section by which 63 controls a timer, the broadcast message display to which 64 performs a display and display termination of a broadcast message, The broadcast message user directions section a user instructs the check whose 65 read the broadcast message to be, and 66 are e-mail

transducers which change a broadcast message into an electronic mail, and others are the same configurations as an example 2.

[0044] Next, actuation of the 3rd example of the above is explained. The broadcast message receive section 61 will hand the received addresser name of a message and a message to the control section 62, if the broadcast message transmitted from the broadcast message sending set as shown in drawing 14 is received. The control section 62 directs a setup of a timer to the timer control section 63, and the timer control section 63 sets up a timer. The system may have the time amount of immobilization beforehand, the setup time of a timer may prepare the user input section of timer time setting in the above-mentioned configuration, and a user may set it up. The control section 62 directs the display of a message to the broadcast message display 64, after a setup of a timer is completed. The broadcast message display 64 displays a message. If a user pushes a confirmation button, the user directions section 65 will tell having pushed the carbon button to the control section 62. The control section 62 directs discharge of a timer to the timer control section 63, and the timer control section 63 cancels a timer. Moreover, the control section 62 directs display termination of a message to the broadcast message display 64, and the broadcast message display 64 ends the display of a message. If the time amount set as the timer in the condition [ that a message is displayed ] passes, the timer control section 63 will notify that the time amount set as the control section 62 by the timer passed. If there is a notice from a timer, the control section 62 will direct display termination of a message to the broadcast message display 64, and the broadcast message display 64 will end the display of a message. Moreover, the control section 62 passes a message and a message addresser to the e-mail transducer 66. The e-mail transducer 66 creates the electronic mail which makes a message addresser name an electronic mail addresser for a message at the contents of the electronic mail, and passes it to the e-mail receive section 51. It is the same procedure as an example 2 after that, and it can be classified into a broadcast message folder, and can be displayed as an electronic mail, and only the person who received the message can read a message now.

[0045] As mentioned above, when there is no check of a fixed time amount addressee to the received broadcast message according to this example, by changing a broadcast message into an electronic mail and ending the display of a message, a message can be read

by others or it can prevent that it becomes impossible for an original addressee to read a message.

[0046]

[Effect of the Invention] Since as for this invention an electronic mail receive section can judge whether it is the mail transmitted from which application in the first place so that clearly from the above-mentioned example, A user can operate now every [ of "deleting only the mail from a certain application" ] application easily. In order that an electronic mail receive section may arrange the received electronic mail for every application to the second at a folder, When [ which reduce a user's latency time and number of actuation at the time of actuation of incorporation etc. ] things can be carried out and an electronic mail receive section has correspondence of a folder, a display format, and a display item in the third The display item suitable for the application which shortened the analysis time amount of e-mail and transmitted the electronic mail, Without displaying by the display format, and showing a user information exactly, and carrying out two or more actuation of the system The memory resource of a computer is effectively utilizable. To the fourth an electronic mail receive section By changing a broadcast message into an electronic mail and ending the display of a message, when there is no check of a fixed time amount addressee to the received broadcast message A message can be read by others or it can prevent that it becomes impossible for an original addressee to read a message.

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DETAILED DESCRIPTION [Detailed Description of the Invention]  
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[Industrial Application] This invention relates to the electronic mail system which offers various applications using the function of an electronic mail.

[0002]

[Description of the Prior Art] Various applications using an electronic mail have been developed as an electronic mail system spreads in recent years. Such applications perform processing required as application, and transmit this result to a user using an electronic mail. The application using the function of such an electronic mail is also called the electronic mail system.

[0003] The conventional electronic mail system is explained using drawing 9. The user directions section in which 101 receives the electronic mail transmitting section and 111 receives the directions from a user, The e-mail creation section in which 112 creates an electronic mail, the mail transfer section which transmits the electronic mail which 102 created, The e-mail receive section where 103 receives an electronic mail receive section and the electronic mail with which 131 is transmitted from the mail transfer section 102, The e-mail analysis section which analyzes the electronic mail which 132 received, and 133 create display information from an analysis result. The application process section in which the e-mail display to display and 104 perform the application section, and 141 processes application, and 142 are the e-mail creation sections which change the result of processing into the format of an electronic mail.

[0004] The outline of the usual electronic mail of operation is explained below. The usual electronic mail describes the contents of the electronic mail by the e-mail transmitting side, sets up the information on electronic mails, such as the destination and the addresser name of an electronic mail, and a subject, creates these

as an electronic mail and transmits it. In an e-mail receiving side, an electronic mail is received, the received electronic mail is analyzed, and the information on electronic mails, such as the destination of an electronic mail, and an addresser name, a subject, and the contents of the electronic mail are acquired. The result of these analyses is changed and displayed on a display format.

[0005] It explains using the conventional example which showed the above-mentioned outline of operation to drawing 9. The electronic mail transmitting section 101 is an e-mail transmitting side, and the user directions section 111 writes an electronic mail, sets up the destination of an electronic mail, or receives user actuation of transmitting an electronic mail. If a user directs transmission of e-mail in the user directions section 111, the user directions section 111 will pass the information on electronic mails, such as the contents of the electronic mail, and the destination of an electronic mail, to the e-mail creation section 112. The e-mail creation section 112 creates an electronic mail from the information on the contents or an electronic mail, and passes it to the mail transfer section 102.

[0006] The example of the format of the electronic mail passed to the mail transfer section 102 is shown in drawing 10 (a). An electronic mail consists of an e-mail information bureau 801 which describes the information on mail of a subject, the destination, an addresser, etc., and the e-mail text section 802 which describes the contents of e-mail. The e-mail information bureau 801 describes in the group of a keyword and its value. for example, -- "-- Subject: -- a patent -- " -- it is .

[0007] The mail transfer section 102 transmits an electronic mail to the electronic mail receive section 103. The e-mail receive section 131 receives an electronic mail, and hands the e-mail analysis section 132. In the e-mail analysis section 132, this is analyzed and an analysis result is passed to the e-mail display 133. The e-mail display 133 changes information required for a display into a display format, and outputs it to displays, such as a terminal and a printer.

[0008] Next, the outline of schedule pipe \*\* application of operation is explained below as an example of application. Schedule pipe \*\* application transmits the contents of reservation by E-mail to the person who was able to put in the schedule in order to tell that the schedule entered, if reservation of a schedule is put in to people. Schedule pipe \*\* application sets up the person who put the schedule into the addresser of an electronic mail so that it can



judge by the side from which who put in the schedule received the electronic mail.

[0009] The above-mentioned outline of operation is explained using drawing 9. The application section 104 is taken as schedule pipe \*\* application. The application process section 141 processes application proper, such as schedule registration, and passes the contents of reservation of a schedule, the destination of an electronic mail, etc. to the e-mail creation section 142. The e-mail creation section 142 creates an electronic mail from the received information, and passes it to the mail transfer section 102. The format of the electronic mail passed from schedule pipe \*\* application is the same as the format of the electronic mail passed from the usual electronic mail.

[0010] The example of the format of the electronic mail passed to drawing 10 (b) from schedule pipe \*\* application is shown. Subsequent processings are the same as the usual electronic mail. The example which displayed the list of the usual electronic mail and the electronic mails received from application is shown in drawing 11. The addresser name and subject of an electronic mail are displayed in the list of electronic mails.

[0011] Moreover, the conventional electronic mail system will usually perform that a user incorporates an electronic mail to his folder, if an electronic mail is received. An electronic mail is displayed by accessing this incorporated electronic mail. Moreover, as a function of the actuation to an electronic mail, there is a function "to classify an electronic mail to a folder." This function classifies the electronic mail which the user received to some folders for every contents, and is kept. Since an electronic mail is transmitted from various applications, a user classifies these electronic mails into the folder for every application, respectively. The electronic mail classified to the folder can be similarly displayed as the folder incorporated first, when it accesses to the folder.

[0012] Drawing 12 shows the configuration of the electronic mail receive section having such a function. The e-mail receive section where 105 receives an electronic mail receive section and 151 receives an electronic mail in drawing 12, The user directions section, as for 152, a user instructs actuation to be to a system, The folder Management Department which takes out an electronic mail from the folder which 153 moved the electronic mail between folders, or the user specified, The e-mail display, 901, 902 and 903, and -- which the e-mail analysis section in which 154

analyzes the contents of the electronic mail, and 155 create display information, and display an electronic mail are a folder which classifies an electronic mail. There is no limit in the number of folders to classify. In this example, the folder 901 is set up as a folder by which an electronic mail is incorporated first.

[0013] A user directs what "e-mail is incorporated for" to the user directions section 152, if it turns out that the electronic mail was received with the BIFUPU log ram etc. The user directions section 152 tells incorporation of an electronic mail to the e-mail receive section 151. The e-mail receive section 151 incorporates an electronic mail to a folder 901. Moreover, when displaying an electronic mail, a user directs which electronic mail of which folder is displayed to the user directions section 152. The user directions section 152 tells the folder Management Department 153 that. The folder Management Department 153 takes out the electronic mail specified from the specified folder, and hands the e-mail analysis section 154. The e-mail analysis section 154 analyzes the contents of the electronic mail, and passes an analysis result to the e-mail display 155. The e-mail display 155 changes information required for a display into a display format, and outputs it to displays, such as a terminal. Furthermore, when moving an electronic mail to another folder, a user directs which electronic mail is moved to which folder to the user directions section 152. The user directions section 152 tells the folder Management Department 153 that. The folder Management Department 153 moves an electronic mail to the specified folder.

[0014] Moreover, when the conventional electronic mail system displayed an electronic mail, also to the electronic mail in which folder, it is the same display format and showed the same item. The example which displayed the electronic mail on drawing 13 is shown. (a) of drawing 13 is an example which displayed the usual electronic mail, and (b) of drawing 13 is an example which displayed the electronic mail transmitted from schedule pipe \*\* application. Though the usual electronic mail was similar to the folder 901 by automatic and the electronic mail transmitted from schedule pipe \*\* application was similar to the folder 902 by automatic, even when which electronic mail is displayed, the contents of a subject, an addresser, and the electronic mail are completely displayed by the same display format.

[0015] Moreover, the approach of a broadcast message is used besides the electronic mail system as a means of communication using a computer in recent years. The approach of a broadcast

message describes the contents which an addresser wants to tell, and if the machine name which an addressee uses is specified, the contents will be displayed on the screen of the machine.

[0016] Drawing 14 shows the configuration of the conventional broadcasting message system. In drawing 14, 106 is a broadcast message sending set and 107 is a broadcast message receiving set. The broadcast message creation section in which 161 creates a broadcast message, The broadcast message transmitting section to which 162 transmits a broadcast message, The broadcast message receive section where 171 receives a broadcast message, The control section by which 172 controls a display and display termination of a broadcast message, The broadcast message display to which 173 performs a display and display termination of a broadcast message, and 174 are the broadcast message user directions sections a user instructs the checks which read the display of a broadcast message to be.

[0017] In the broadcast message sending set 106, if a user creates a message in the broadcast message creation section 161 and specifies a phase hand's machine name, the broadcast message creation section 161 will pass the machine name of the created message and a phase hand to the broadcast message transmitting section 162. The broadcast message transmitting section 162 transmits a message to the specified machine. In the broadcast message receiving set 107, if a broadcast message is received in the broadcast message receive section 171, the received addresser name of a message and a message will be passed to the control section 172. The control section 172 directs the display of delivery and a message for the addresser name of a message and a message to the broadcast message display 173. The broadcast message display 173 displays the received addresser name of a message and a message. The example which displayed the message is shown in drawing 15 . A user will push a confirmation button, if a message is checked. If a confirmation button is pushed, the user directions section 174 will tell having pushed the carbon button to the control section 172. The control section 172 directs termination of a display to the broadcast message display 173. The broadcast message display 173 ends a message indicator.

[0018]

[Problem(s) to be Solved by the Invention] However, in the above-mentioned conventional electronic mail system, since an electronic mail receive section does not have a means to distinguish whether it is the electronic mail transmitted from which application in the

first place, it is difficult to operate it for every application, and a user has to judge from the displayed contents. For example, when carrying out actuation of "deleting only the result of schedule pipe \*\* application", a user has to check and delete every one contents of e-mail. It is possible to attach an application name to a subject as an approach of distinguishing application, or to distinguish the addresser name of e-mail by making it the user of an application proper. However, in the case of a subject, it is also considered the electronic mail transmitted from the usual electronic mail and that the same subject as an application name is attached, and a user may change a subject in an electronic mail receive section. Therefore, application cannot be specified in a subject. Moreover, in the case of an addresser name, the application which does not make an application name an addresser name but makes a use user an addresser name is also considered. For example, in the schedule pipe \*\* application of the conventional example, an addresser name is the person who put in the schedule. Therefore, application cannot be specified by the addresser name.

[0019] In order for directions of a user to perform [ second ] incorporation of an electronic mail and migration to a folder, it thinks, also when there are many electronic mails transmitted at once depending on application, and the time amount which incorporation and migration of an electronic mail take becomes very long. Moreover, when classifying an electronic mail to a folder for every application, if there are many applications, the count of actuation for a classification increases and the user is serious.

[0020] If the information which should be shown to a user for every application differs and the same contents are displayed [ third ] with all applications, information does not get across to a user correctly -- information required for the application is missing. Moreover, if all the information included in an electronic mail is displayed, the field which can display a required item will become small by the item which does not have the need for a certain application is not only displaying, but displaying many unnecessary items. Furthermore, in order to display all the information included in an electronic mail, all the information on an electronic mail will have to be analyzed and analysis time amount will become long.

[0021] On the other hand, an electronic mail system with the display format according to each application or a display item is prepared for every application, and there is the approach of accessing only the folder holding the electronic mail sent from the application. However, a display format only differs from a display

item, and this approach serves as a system of the same configuration except e-mail displays, such as the folder Management Department and the e-mail analysis section. When two or more these systems operate, many memory resources of a computer are used, and also when there are many applications and it stops operating, it thinks.

[0022] With a broadcasting message system, if separated from the seat of the addressee, since a confirmation button cannot be pushed, a message is set [ being displayed as as, and ] to the fourth. Therefore, it thinks, also when a message is read by others, and the problem of security occurs. When others push a confirmation button and eliminate a message, it becomes impossible moreover, for an original addressee to read a message.

[0023] By the ability this invention's solving the above-mentioned conventional trouble, and judging in what was transmitted in the first place from which application in the electronic mail receive section Can operate it now for every application and an electronic mail system automatically the electronic mail for every application by classifying to the folder for every application [ second ] By third being able to mitigate the latency time of the user at the time of actuation of incorporation etc., and having correspondence of a folder, a display format, and a display item with an electronic mail system The display item suitable for the application which shortened the analysis time amount of e-mail and transmitted the electronic mail, Without displaying by the display format, and showing a user information exactly, and carrying out two or more actuation of the system When the memory resource of a computer can be utilized effectively and there is no check of a fixed time amount addressee in the fourth to the received broadcast message By changing a broadcast message into an electronic mail and ending the display of a message, a message is read by others or it aims at offering the electronic mail system which can prevent that it becomes impossible for an original addressee to read a message.

[0024]

[Means for Solving the Problem] In order to attain the above-mentioned purpose, in the first place, in addition to the conventional configuration, it has an application name adjunct in the application section, and, as for the electronic mail system of this invention, it has the application name analysis section in the electronic mail receive section.

[0025] It has the file corresponding to the application name / folder name the automatic-classification section which classifies the

electronic mail for every application into the second in an electronic mail receive section at a folder in addition to the above-mentioned configuration, and that correspondence which should just classify the electronic mail of which application into which folder are described to be.

[0026] It has the file corresponding to the folder name / display format correspondence of whether the electronic mail of which folder makes an electronic mail receive section display which display format and a display item on the third in addition to the above-mentioned configuration is described to be.

[0027] It has the timer control section which gives an electronic mail receive section timer control the fourth in addition to the configuration of the conventional broadcast message receiving set, and the e-mail transducer which changes a broadcast message into an electronic mail.

[0028]

[Function] This invention by judging from which application an electronic mail is transmitted for an electronic mail receive section in the first place by the above-mentioned configuration Come to be able to perform actuation for every application, and to the second, when an electronic mail receive section is similar by automatic for every application in an electronic mail at a folder When the latency time of the user at the time of actuation of incorporation etc. can be mitigated and an electronic mail receive section has correspondence of a folder, a display format, and a display item in the third The display item suitable for the application which shortened the analysis time amount of e-mail and transmitted the electronic mail, Without displaying by the display format, and showing a user information exactly, and carrying out two or more actuation of the system The memory resource of a computer is effectively utilizable. To the fourth an electronic mail receive section By changing a broadcast message into an electronic mail and ending the display of a message, when there is no check of a fixed time amount addressee to the received broadcast message A message can be read by others or it can prevent that it becomes impossible for an original addressee to read a message.

[0029]

[Example]

(Example 1) The 1st example of this invention is explained hereafter, referring to drawing 1 . In drawing 1, as for the user directions section and 12, the e-mail creation section and 2 are the mail transfer section, for the e-mail analysis section and 33, as for

the application section and 41, an e-mail display and 4 are [ an electronic mail receive section and 31 / an e-mail receive section and 32 / the application process section and 42 ] the e-mail creation sections, and the electronic mail transmitting section and 11 of 3 are [ 1 ] the same as that of the conventional example which these showed to drawing 9 . The application name adjunct which adds an application name to the mail which 43 creates, and 34 are the application name analysis sections which analyze from which application the received mail is transmitted.

[0030] Next, actuation of the 1st example of the above is explained. Actuation of the electronic mail transmitting section 1 is the same as the conventional example. In the application section 4, the application process section 41 will pass the application name else [, such as the result, destination of e-mail, etc., ] to the e-mail creation section 42, if processing required for application is performed. The e-mail creation section 42 creates e-mail from the destination, a result, etc. Under the present circumstances, the application name passed from the application name adjunct 43 is added.

[0031] The example of addition of an application name is shown in drawing 2. The application name adjunct 43 adds the application name which are a keyword "Application:" and its value to an e-mail information bureau. Then, the e-mail creation section 42 passes the created mail to the mail transfer section 2. The mail transfer section 2 transmits e-mail to the destination of relevance. The e-mail receive section 31 will hand the e-mail analysis section 32, if e-mail is received. The e-mail analysis section 32 analyzes this mail. The group of a keyword "Application:" and its value is passed to the application name analysis section 34 in that case. The application name analysis section 34 analyzes an application name from the passed information, and returns it to the e-mail analysis section 32. Thereby, it can judge whether it is the mail transmitted from which application. The e-mail analysis section 32 passes information and an application name required for a display to the e-mail display 33. The e-mail display 33 changes information and an application name required for a display into a display format, and outputs them to a display.

[0032] The example which displayed the list of e-mail on drawing 3 is shown. In the list of e-mail, the addresser name and the application name other than a subject are displayed. For this reason, even if a user does not check the contents, he can judge whether it is the mail transmitted from which application. Moreover,

by searching using this item, only mail of a certain application can be deleted or a list can be displayed now.

[0033] As mentioned above, the electronic mail receive section 3 can judge whether it is the mail transmitted from which application, and actuation becomes possible according to this example for every application.

[0034] In addition, in this example, although the example of a display of a list of e-mail was given, neither a display format nor the contents of a display is limited. Moreover, it does not limit only to a list of e-mail, either.

[0035] (Example 2) Next, the 2nd example of this invention is explained, referring to drawing 4. The e-mail receive section where 5 receives an electronic mail receive section and 51 receives an electronic mail in drawing 4, The automatic-classification section which classifies into a folder automatically the electronic mail which 52 received, The user directions section, as for 53, a user instructs actuation to be to a system, The folder Management Department where 54 takes out an electronic mail from the folder of relevance, the e-mail analysis section in which 55 analyzes the contents of the electronic mail, The application name analysis section in which the electronic mail which 56 received analyzes from which application it is transmitted, The e-mail display which 57 creates display information and displays an electronic mail, the file corresponding to an application name / folder name 58 describes the classification place folder name of the electronic mail for every application to be, 59 is a file corresponding to the display format of the electronic mail held for every folder at the folder, and the folder name / display format which sets up a display item. 91, 92, 93, and -- are folders which classify an electronic mail.

[0036] Next, actuation of the 2nd example of the above is explained. The automatic-classification section 52 will pass the electronic mail received in the e-mail analysis section 55, if the e-mail receive section 51 is supervised periodically and the e-mail receive section 51 receives an electronic mail from the mail transfer section 2 of an example 1. The e-mail analysis section 55 analyzes this electronic mail, analyzes whether it is the electronic mail transmitted from which application in the application analysis section 56 like an example 1, and returns an application name to the automatic-classification section 52. The automatic-classification section 52 analyzes the file 58 corresponding to an application name / folder name, and acquires the folder name



corresponding to the application name acquired from the e-mail analysis section 55.

[0037] The example of the file 58 corresponding to an application name / folder name is shown in drawing 5. The group of an application name and a folder name describes the file 58 corresponding to an application name / folder name. Then, the automatic-classification section 52 moves an electronic mail to the folder of relevance, and ends automatic classification. For example, when the file 58 corresponding to the application name / folder name shown in drawing 5 was used and the application which the received electronic mail transmitted is an electronic mail, it is similar to an electronic mail folder by automatic, when it is schedule pipe \*\* application, it is similar to a schedule pipe \*\* folder by automatic, and when it is Application C, it is similar to Folder C by automatic.

[0038] When displaying an electronic mail, a user specifies a folder and an electronic mail to the user directions section 53, and directs a display. The user directions section 53 tells the folder Management Department 54 that. The folder Management Department 54 takes out the electronic mail specified from the specified folder, and hands the e-mail analysis section 55 with a folder name. In the e-mail analysis section 55, the information on the electronic mail which should be analyzed is acquired with reference to the file 59 corresponding to a folder name / display format, only the information is analyzed, and an analysis result is passed to the e-mail display 57 with a folder name. The e-mail display 57 acquires the display format corresponding to a folder name, and a display item with reference to the file 59 corresponding to a folder name / display format.

[0039] The example of the file 59 corresponding to a folder name / display format is shown in drawing 6. The group of a folder name and the information on the electronic mail corresponding to a corresponding display format, a display item, and each display item describes the file 59 corresponding to a folder name / display format. If the display format corresponding to the specified folder and a display item are acquired, the e-mail display 57 will change information required for a display into a display format, and will output it to e-mail displays, such as a terminal. For example, when the usual electronic mail and the electronic mail transmitted to the folder 92 from schedule pipe \*\* application are classified at the folder 91, the example the case where the usual electronic mail in a folder 91 is displayed, and at the time of displaying the electronic

mail transmitted from the schedule pipe \*\* application in a folder 92 is shown in drawing 7 .

[0040] The usual electronic mail displays the contents of a subject, an addresser, and the electronic mail like drawing 7 (a). The electronic mail transmitted from schedule pipe \*\* application makes an addresser a schedule input person, by making the destination of an electronic mail into a meeting participant, makes the contents of the electronic mail the contents of a meeting, and displays them like drawing 7 (b). Thus, while a user can understand easily, the meeting participant who is important information can be intelligibly displayed by making into schedule pipe \*\* to transmit the electronic mail displayed by displaying from schedule pipe \*\* application.

[0041] As mentioned above, according to this example, a user's latency time and number of actuation at the time of actuation of incorporation of an electronic mail etc. can be reduced by [ it had the file 58 corresponding to the application name / folder name which describes the classification place folder name of the electronic mail for every application in the electronic mail receive section, and the electronic mail system transmitted the received electronic mail to it ] being similar by automatic for every application.

[0042] Moreover, the memory resource of a computer can be utilized effectively, without shortening the analysis time amount of e-mail, displaying by the display item and display format suitable for the application which transmitted the electronic mail, and showing a user information exactly, and carrying out two or more actuation of the system, when an electronic mail system has the correspondence file 59 of a folder, a display format, and a display item. In addition, the example of a display given by this example limits neither a display format nor a display item.

[0043] (Example 3) Next, it explains, referring to drawing 8 about the 3rd example of this invention. The broadcast message receive section where 6 receives an electronic mail receive section and 61 receives a broadcast message in drawing 8 , 62 The display of a broadcast message, control of display termination, a setup and discharge of a timer, The control section which performs the directions which change a broadcast message into an electronic mail, The timer control section by which 63 controls a timer, the broadcast message display to which 64 performs a display and display termination of a broadcast message, The broadcast message user directions section a user instructs the check whose 65 read the broadcast message to be, and 66 are e-mail

transducers which change a broadcast message into an electronic mail, and others are the same configurations as an example 2.

[0044] Next, actuation of the 3rd example of the above is explained. The broadcast message receive section 61 will hand the received addresser name of a message and a message to the control section 62, if the broadcast message transmitted from the broadcast message sending set as shown in drawing 14 is received. The control section 62 directs a setup of a timer to the timer control section 63, and the timer control section 63 sets up a timer. The system may have the time amount of immobilization beforehand, the setup time of a timer may prepare the user input section of timer time setting in the above-mentioned configuration, and a user may set it up. The control section 62 directs the display of a message to the broadcast message display 64, after a setup of a timer is completed. The broadcast message display 64 displays a message. If a user pushes a confirmation button, the user directions section 65 will tell having pushed the carbon button to the control section 62. The control section 62 directs discharge of a timer to the timer control section 63, and the timer control section 63 cancels a timer. Moreover, the control section 62 directs display termination of a message to the broadcast message display 64, and the broadcast message display 64 ends the display of a message. If the time amount set as the timer in the condition [ that a message is displayed ] passes, the timer control section 63 will notify that the time amount set as the control section 62 by the timer passed. If there is a notice from a timer, the control section 62 will direct display termination of a message to the broadcast message display 64, and the broadcast message display 64 will end the display of a message. Moreover, the control section 62 passes a message and a message addresser to the e-mail transducer 66. The e-mail transducer 66 creates the electronic mail which makes a message addresser name an electronic mail addresser for a message at the contents of the electronic mail, and passes it to the e-mail receive section 51. It is the same procedure as an example 2 after that, and it can be classified into a broadcast message folder, and can be displayed as an electronic mail, and only the person who received the message can read a message now.

[0045] As mentioned above, when there is no check of a fixed time amount addressee to the received broadcast message according to this example, by changing a broadcast message into an electronic mail and ending the display of a message, a message can be read

by others or it can prevent that it becomes impossible for an original addressee to read a message.

[0046]

[Effect of the Invention] Since as for this invention an electronic mail receive section can judge whether it is the mail transmitted from which application in the first place so that clearly from the above-mentioned example, A user can operate now every [ of "deleting only the mail from a certain application" ] application easily. In order that an electronic mail receive section may arrange the received electronic mail for every application to the second at a folder, When [ which reduce a user's latency time and number of actuation at the time of actuation of incorporation etc. ] things can be carried out and an electronic mail receive section has correspondence of a folder, a display format, and a display item in the third The display item suitable for the application which shortened the analysis time amount of e-mail and transmitted the electronic mail, Without displaying by the display format, and showing a user information exactly, and carrying out two or more actuation of the system The memory resource of a computer is effectively utilizable. To the fourth an electronic mail receive section By changing a broadcast message into an electronic mail and ending the display of a message, when there is no check of a fixed time amount addressee to the received broadcast message A message can be read by others or it can prevent that it becomes impossible for an original addressee to read a message.

[Translation done.]